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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/564,098

01/09/2006

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OGW-0415

9076

7590 05/12/2008  
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EXAMINER

FISCHER, JUSTIN R

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

05/12/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/564,098 | <b>Applicant(s)</b><br>TANNO, ATSUSHI |  |
|                              | <b>Examiner</b><br>Justin R. Fischer | <b>Art Unit</b><br>1791               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>010906</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (JO 2002178712). Suzuki is directed to a low noise pneumatic tire comprising a tread and a plurality of belt shaped absorbing members or objects 5 attached to said tread via an adhesive or fixing band (Paragraphs 15 and 17 of attached machine translation). The reference further teaches that the object is formed of a porous material, such as a foam sponge, having an apparent density below  $100 \text{ kg/m}^3$ , more preferably below  $50 \text{ kg/m}^3$  (Paragraphs 9 and 18). It is noted that the claims do not distinguish the adhesive layer of Suzuki from the claimed “fixing elastic band”.

Regarding claim 2, the total length of the objects (sound absorbing members) is greater than 5% of the circumferential length of the tire and less than 90% of the circumferential length of the tire (Paragraph 17).

With respect to claim 6, one of ordinary skill in the art at the time of the invention would have expected the porous material of Suzuki to demonstrate the claimed characteristics since it has an apparent density that mimics that of the claimed invention (appears to be extremely similar construction).

### ***Claim Rejections - 35 USC § 103***

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki. As detailed above, Suzuki is directed to a low noise pneumatic tire comprising a tread and a plurality of belt shaped absorbing members or objects 5 attached to said tread via an adhesive or fixing band (Paragraphs 15 and 17). The reference further teaches that the object is formed of a porous material, such as a foam sponge, having an apparent density below  $100 \text{ kg/m}^3$ , more preferably below  $50 \text{ kg/m}^3$  (Paragraphs 9 and 18). While the reference fails to expressly disclose an embodiment comprising a plurality of belt shaped members having a density between 10 and  $70 \text{ kg/m}^3$ , such a combination would have been obvious in view of the general disclosure of Suzuki and applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed arrangement.

Regarding claim 2, the total length of the objects (sound absorbing members) is greater than 5% of the circumferential length of the tire and less than 90% of the circumferential length of the tire (Paragraph 17).

As to claim 3, the reference generally suggests that the length of a sound absorbing member or object is equal to or greater than 1.0 times the height or thickness (Paragraph). Based on such a disclosure, one of ordinary skill in the art at the time of the invention would have found it obvious to form the object with a wide variety of

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dimensions, including a thickness between the broad range of 5 and 50 mm. It is further noted that applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed thickness.

With respect to claims 4 and 5, Suzuki discloses the formation of an uneven surface in order to heighten the noise reduction effect (Paragraphs 10, 17, and 22). Furthermore, it is evident that the unevenness is defined by small corrugations and such a construction would be less than 20 mm.

Regarding claims 6 and 8, one of ordinary skill in the art at the time of the invention would have expected the porous material of Suzuki (object 5) to demonstrate the claimed characteristics since it has an apparent density that mimics that of the claimed invention (appears to be extremely similar construction).

As to claim 7, Suzuki further teaches the inclusion of a film having an elastic modulus of at least 1 MPa (Paragraph 18)- such a layer can be viewed as a sound absorbing layer. Additionally, one of ordinary skill in the art at the time of the invention would have readily appreciated a thickness between 5 and 50 mm in view of the broad disclosure of objects 5 and applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed thickness values.

With respect to claim 9, Suzuki suggests the inclusion of a film on the inner surface of object 5 in order to optimize the noise reduction effect of the assembly- such a teaching suggests that the film significantly contributes to the noise reduction effect and would have a high acoustic absorption coefficient. Lastly, applicant has not

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provided a conclusive showing of unexpected result to establish a criticality for the claimed coefficient.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/563,297. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to form the sound absorbing material of US ‘297 as a continuous structure or as a discontinuous structure (reduces weight while providing necessary degree of sound absorption).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1-9, 15, and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 10/563,673. Although the conflicting claims are not identical, they are not patentably distinct from each other because (a) the claimed densities are consistent with those commonly used in similar low noise pneumatic tires and (b) it would have been obvious to form the sound absorbing material of US '673 as a continuous structure or as a discontinuous structure (reduces weight while providing necessary degree of sound absorption). .

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 11/795,350. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed densities are consistent with those commonly used in similar low noise pneumatic tires .

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 11/795,280. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed densities are consistent with those commonly used in similar low noise pneumatic tires.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 11/632,591. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed densities are consistent with those commonly used in similar low noise pneumatic tires.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 10/580,518. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed densities are consistent with those commonly used in similar low noise pneumatic tires.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No. 10/563,303. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed densities are consistent with those commonly used in similar low noise pneumatic tires.



This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claims 1-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 7,140,412.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed densities are consistent with those commonly used in similar low noise pneumatic tires.

#### ***Allowable Subject Matter***

14. Claims 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin Fischer  
/Justin R Fischer/  
Primary Examiner, Art Unit 1791